

UNE-P Economics: Revenue Impact - SBC

| | Plus: | | Plus: | Access/nat'l ATA toll | USF | Total | Less | Revenue Lost |
|---------------|---------------------|------|-------|-----------------------|------|-------|-------|--------------|
| | Basic Local Service | SLC | | | | | | |
| Illinois | 12.50 | 4.49 | 9.00 | 5.00 | 0.37 | 31.36 | 8.92 | 27.44 |
| Indiana | 12.50 | 5.49 | 9.00 | 5.00 | 0.42 | 32.41 | 17.07 | 15.34 |
| Michigan | 21.00 | 5.31 | 9.00 | 5.00 | 0.43 | 40.74 | 12.74 | 28.00 |
| Ohio | 14.25 | 5.35 | 9.00 | 5.00 | 0.42 | 34.02 | 14.41 | 19.61 |
| Wisconsin | 19.95 | 5.03 | 9.00 | 5.00 | 0.23 | 39.21 | 19.68 | 19.53 |
| California | 10.97 | 4.40 | 9.00 | 5.00 | 0.44 | 29.81 | 11.68 | 18.13 |
| Connecticut | 12.54 | 5.69 | 9.00 | 5.00 | 0.62 | 32.85 | 20.81 | 12.04 |
| Nevada | 10.75 | 5.26 | 9.00 | 5.00 | 0.54 | 30.55 | 21.17 | 9.38 |
| Arkansas | 31.95 | 5.20 | 9.00 | 5.00 | 0.48 | 51.63 | 16.42 | 35.06 |
| Kansas | 14.45 | 5.20 | 9.00 | 5.00 | 0.48 | 34.13 | 16.39 | 17.74 |
| Missouri | 16.40 | 5.20 | 9.00 | 5.00 | 0.48 | 36.58 | 19.37 | 17.21 |
| Oklahoma | 12.28 | 5.20 | 9.00 | 5.00 | 0.48 | 31.95 | 18.45 | 13.51 |
| Texas | 10.45 | 5.20 | 9.00 | 5.00 | 0.48 | 39.63 | 17.91 | 21.72 |
| Average/Total | 14.88 | 4.93 | 9.00 | 5.00 | 0.44 | 34.25 | 14.50 | 19.76 |
| Avg Ameritech | 15.65 | 5.09 | 9.00 | 5.00 | 0.39 | 35.13 | 13.40 | 21.73 |

Loop

Urban

Suburban

Rural

Local Switching

per port

per MOU

Tandem switching


per MOU

Shared transport


per MOU

Avg UNE-P

| | | | | | | | | | |
|---------------|-------|-------|-------|------|-----------|--------|--------|--------|-------|
| Illinois | 2.59 | 7.07 | 11.40 | 5.01 | unlimited | 0.0002 | 0.0008 | 0.0008 | 8.92 |
| Indiana | 8.03 | 8.15 | 8.99 | 5.34 | 0.0034 | 0.0003 | 0.0007 | 0.0007 | 17.07 |
| Michigan | 8.47 | 8.73 | 12.54 | 2.51 | 0.0012 | 0.0011 | 0.0004 | 0.0004 | 17.74 |
| Ohio | 5.93 | 7.97 | 9.52 | 4.63 | 0.0032 | 0.0007 | na | na | 14.41 |
| Wisconsin | 10.90 | 10.90 | 10.90 | 4.98 | 0.0035 | 0.0007 | 0.0011 | 0.0011 | 19.68 |
| California | 8.83 | 11.27 | 19.63 | 0.88 | 0.0008 | 0.0001 | 0.0013 | 0.0013 | 11.68 |
| Connecticut | 8.95 | 12.03 | 19.69 | 3.31 | 0.0072 | 0.0020 | na | na | 20.81 |
| Nevada | 11.75 | 22.66 | 66.31 | 1.63 | 0.0016 | 0.0018 | 0.0073 | 0.0073 | 21.17 |
| Arkansas | 11.86 | 13.64 | 23.34 | 1.61 | 0.0018 | 0.0017 | 0.0004 | 0.0004 | 16.57 |
| Kansas | 11.86 | 13.64 | 23.34 | 1.61 | 0.0018 | 0.0008 | 0.0004 | 0.0004 | 16.39 |
| Missouri | 12.71 | 20.71 | 33.29 | 2.06 | 0.0021 | 0.0008 | 0.0004 | 0.0004 | 19.37 |
| Oklahoma | 12.14 | 13.65 | 26.25 | 2.37 | 0.0029 | 0.0010 | na | na | 18.45 |
| Texas | 12.14 | 13.65 | 18.98 | 2.90 | 0.0021 | 0.0008 | 0.0040 | 0.0040 | 17.91 |
| Average | 8.85 | 11.32 | 18.01 | 2.73 | 0.0018 | 0.0006 | 0.0008 | 0.0008 | 14.50 |
| Avg Ameritech | 6.37 | 8.21 | 10.79 | 4.39 | 0.0019 | 0.0006 | 0.0005 | 0.0005 | 13.40 |

 SBC Warburg

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URBS VALENTINUS 

| | Loop | Local Switching | Tandem switching | Shared transport | Avg UNE-P |
|----------------|-------|-----------------|------------------|------------------|-----------|
| Alabama | 15.24 | 24.85 | 2.07 | 0.0020 | 0.0015 |
| Florida | 17.79 | 17.27 | 33.36 | 0.0008 | 0.0006 |
| Georgia | 14.21 | 16.41 | 26.08 | 0.0016 | 0.0007 |
| Kentucky | 10.56 | 15.34 | 31.11 | 0.0012 | 0.0004 |
| Louisiana | 14.05 | 24.14 | 49.30 | 0.0021 | 0.0047 |
| Mississippi | 15.58 | 20.65 | 29.51 | 0.0024 | 0.0004 |
| North Carolina | 12.11 | 21.24 | 33.65 | 0.0017 | 0.0009 |
| South Carolina | 14.94 | 21.39 | 26.72 | 0.0011 | 0.0005 |
| Tennessee | 13.19 | 17.23 | 22.53 | 0.0008 | 0.0010 |
| Average | 13.26 | 18.96 | 32.77 | 0.0013 | 0.0006 |

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| | Plus | Plus | Plus | Plus | Plus | Plus | Plus | Revenue lost = Total |
|---------------------|----------|----------------|-----------------------|-----------------|------------------|------------------|--------------|----------------------|
| Basic Local Service | S/LC | Vertical serv. | Access/local ATA toll | USF | Retail Revenue | UNE-P | Revenue lost | |
| Connecticut | 13.43 | 5.69 | 9.00 | 5.00 | 33.74 | 20.81 | 12.93 | 12.93 |
| D.C. | 12.78 | 3.87 | 9.00 | 5.00 | 31.77 | 15.87 | 15.35 | 15.35 |
| Delaware | 11.29 | 6.00 | 9.00 | 5.00 | 31.86 | 16.03 | 15.83 | 15.83 |
| Maryland | 16.81 | 5.69 | 9.00 | 5.00 | 37.07 | 18.82 | 18.25 | 18.25 |
| New Jersey | 7.47 | 6.00 | 9.00 | 5.00 | 28.04 | 12.61 | 15.43 | 15.43 |
| West Virginia | 29.00 | 6.00 | 9.00 | 5.00 | 49.57 | 26.50 | 23.07 | 23.07 |
| Pennsylvania | 11.61 | 6.00 | 9.00 | 5.00 | 32.18 | 15.11 | 17.07 | 17.07 |
| Virginia | 12.64 | 6.00 | 9.00 | 5.00 | 33.21 | 17.07 | 16.14 | 16.14 |
| Maine | 16.35 | 6.00 | 9.00 | 5.00 | 36.92 | 15.34 | 21.57 | 21.57 |
| Massachusetts | 16.85 | 6.00 | 9.00 | 5.00 | 37.47 | 15.09 | 22.33 | 22.33 |
| New Hampshire | 13.86 | 6.00 | 9.00 | 5.00 | 34.43 | 25.54 | 8.89 | 8.89 |
| New York | 11.05 | 6.00 | 9.00 | 5.00 | 31.62 | 17.33 | 19.28 | 19.28 |
| Rhode Island | 14.78 | 6.00 | 9.00 | 5.00 | 35.35 | 27.46 | 7.89 | 7.89 |
| Vermont | 17.20 | 6.00 | 9.00 | 5.00 | 37.77 | 13.85 | 23.92 | 23.92 |
| Average/Total | 12.47 | 5.95 | 9.00 | 5.00 | 32.99 | 15.10 | 17.89 | 17.89 |
| | Loop | | | Local switching | Tandem switching | Shared transport | | |
| Urban | per port | per MOU | per MOU | per MOU | per MOU | per MOU | Avg UNE-P | |
| Connecticut | 8.95 | 12.03 | 19.69 | 3.31 | 0.0072 | 0.0020 | na | 20.81 |
| D.C. | 10.81 | 10.81 | 10.81 | 1.55 | 0.0030 | 0.0010 | 0.0015 | 15.87 |
| Delaware | 10.07 | 13.13 | 16.67 | 2.23 | 0.0028 | 0.0007 | 0.0001 | 16.03 |
| Maryland | 12.11 | 12.85 | 25.96 | 1.90 | 0.0038 | 0.0007 | 0.0004 | 18.82 |
| New Jersey | 8.12 | 9.59 | 10.92 | 0.73 | 0.0026 | 0.0013 | 0.0025 | 12.61 |
| West Virginia | 14.09 | 22.04 | 43.44 | 1.60 | 0.0072 | 0.0002 | 0.0067 | 26.50 |
| Pennsylvania | 10.25 | 11.00 | 14.00 | 2.67 | 0.0017 | 0.0008 | 0.0001 | 15.11 |
| Virginia | 10.74 | 16.45 | 29.40 | 1.30 | 0.0031 | 0.0006 | 0.0001 | 17.07 |
| Maine | 11.44 | 13.47 | 18.75 | 0.94 | 0.0017 | 0.0027 | 0.0009 | 15.34 |
| Massachusetts | 7.54 | 14.11 | 20.04 | 2.00 | 0.0033 | 0.0012 | 0.0022 | 15.09 |
| New Hampshire | 14.01 | 15.87 | 24.09 | 2.31 | 0.0079 | 0.0016 | 0.0010 | 25.54 |
| New York | 7.20 | 11.31 | 15.51 | 2.57 | 0.0011 | na | na | 17.33 |
| Rhode Island | 11.19 | 15.44 | 19.13 | 1.86 | 0.0127 | 0.0012 | 0.0022 | 27.46 |
| Vermont | 7.72 | 8.35 | 21.63 | 1.03 | 0.0040 | 0.0009 | 0.0006 | 13.85 |
| Average | 9.34 | 12.33 | 18.16 | 1.98 | 0.0026 | 0.0007 | 0.0008 | 15.10 |

UNE-P Economics: Revenue Impact - Qwest

| | | Plus: | Plus: | Plus: | Plus: | Total | Less | = Total |
|---------------|---------------------|-------|----------------|------------------------|-------|----------------|-------|--------------|
| | Basic Local Service | SLC | Vertical serv. | Access/Intral ATA toll | USF | Retail Revenue | UNE-P | Revenue Lost |
| Arizona | 13.18 | 6.00 | 8.00 | 5.00 | 0.56 | 32.74 | 28.10 | 4.64 |
| Colorado | 14.92 | 6.00 | 8.00 | 5.00 | 0.56 | 34.48 | 12.88 | 21.60 |
| Idaho | 14.48 | 6.00 | 8.00 | 5.00 | 0.56 | 34.04 | 22.44 | 11.59 |
| Iowa | 11.68 | 4.72 | 8.00 | 5.00 | 0.56 | 29.96 | 17.15 | 12.81 |
| Minnesota | 14.36 | 4.89 | 8.00 | 5.00 | 0.56 | 32.81 | 13.45 | 19.36 |
| Montana | 16.73 | 6.00 | 8.00 | 5.00 | 0.56 | 36.29 | 27.34 | 8.95 |
| Nebraska | 19.23 | 5.16 | 8.00 | 5.00 | 0.56 | 37.95 | 25.19 | 12.75 |
| New Mexico | 10.66 | 6.00 | 8.00 | 5.00 | 0.56 | 30.22 | 21.74 | 8.48 |
| North Dakota | 17.69 | 6.00 | 8.00 | 5.00 | 0.56 | 37.25 | 22.90 | 14.35 |
| Oregon | 13.80 | 6.00 | 8.00 | 5.00 | 0.56 | 33.36 | 20.66 | 12.70 |
| South Dakota | 16.65 | 6.00 | 8.00 | 5.00 | 0.56 | 36.21 | 23.54 | 12.67 |
| Utah | 11.03 | 6.00 | 8.00 | 5.00 | 0.56 | 30.59 | 19.45 | 11.14 |
| Washington | 12.50 | 5.92 | 8.00 | 5.00 | 0.56 | 31.98 | 10.72 | 21.26 |
| Wyoming | 23.10 | 6.00 | 8.00 | 5.00 | 0.56 | 42.66 | 28.26 | 14.40 |
| Average/Total | 13.75 | 5.75 | 8.00 | 5.00 | 0.56 | 33.06 | 18.33 | 14.73 |

| | Loop | | Local Switching | | Tandem switching | Shared transport | Avg. UNE-P |
|--------------|-------|----------|-----------------|----------|------------------|------------------|------------|
| | Urban | Suburban | Rural | per port | per MOU | per MOU | per MOU |
| Arizona | 18.96 | 34.94 | 56.53 | 1.61 | 0.0028 | 0.0014 | 0.0009 |
| Colorado | 5.94 | 12.31 | 32.79 | 1.86 | 0.0020 | 0.0020 | 0.0020 |
| Idaho | 15.81 | 24.01 | 40.92 | 1.34 | 0.0017 | 0.0032 | 0.0022 |
| Iowa | 13.11 | 15.64 | 27.27 | 1.15 | 0.0007 | 0.0042 | 0.0013 |
| Minnesota | 8.81 | 12.33 | 21.91 | 1.08 | 0.0018 | 0.0013 | 0.0015 |
| Montana | 23.10 | 23.90 | 27.13 | 1.58 | 0.0007 | 0.0068 | 0.0015 |
| Nebraska | 15.14 | 35.05 | 77.92 | 2.47 | 0.0007 | 0.0026 | 0.0012 |
| New Mexico | 17.75 | 20.30 | 26.23 | 1.38 | 0.0011 | 0.0016 | 0.0019 |
| North Dakota | 14.78 | 24.92 | 56.44 | 1.27 | 0.0007 | 0.0084 | 0.0044 |
| Oregon | 13.95 | 25.20 | 56.21 | 1.26 | 0.0013 | 0.0016 | 0.0000 |
| South Dakota | 17.01 | 18.54 | 24.37 | 1.84 | 0.0035 | 0.0017 | 0.0014 |
| Utah | 14.77 | 17.76 | 20.29 | 0.94 | 0.0026 | 0.0011 | 0.0009 |
| Washington | 6.41 | 11.35 | 12.76 | 1.34 | 0.0012 | 0.0014 | 0.0022 |
| Wyoming | 19.91 | 26.94 | 30.13 | 2.64 | 0.0038 | 0.0016 | 0.0003 |
| Average | 12.17 | 19.86 | 34.72 | 1.46 | 0.0017 | 0.0020 | 0.0014 |

UNE-P Economics: Calculating the Impact

2) Estimated Average *Retail* COGS and SG&A per Line Based on Existing Wireline EBITDA Margins

- Assumes residential wireline margins are equivalent to total wireline margins

3) Calculated Wholesale EBITDA Contribution

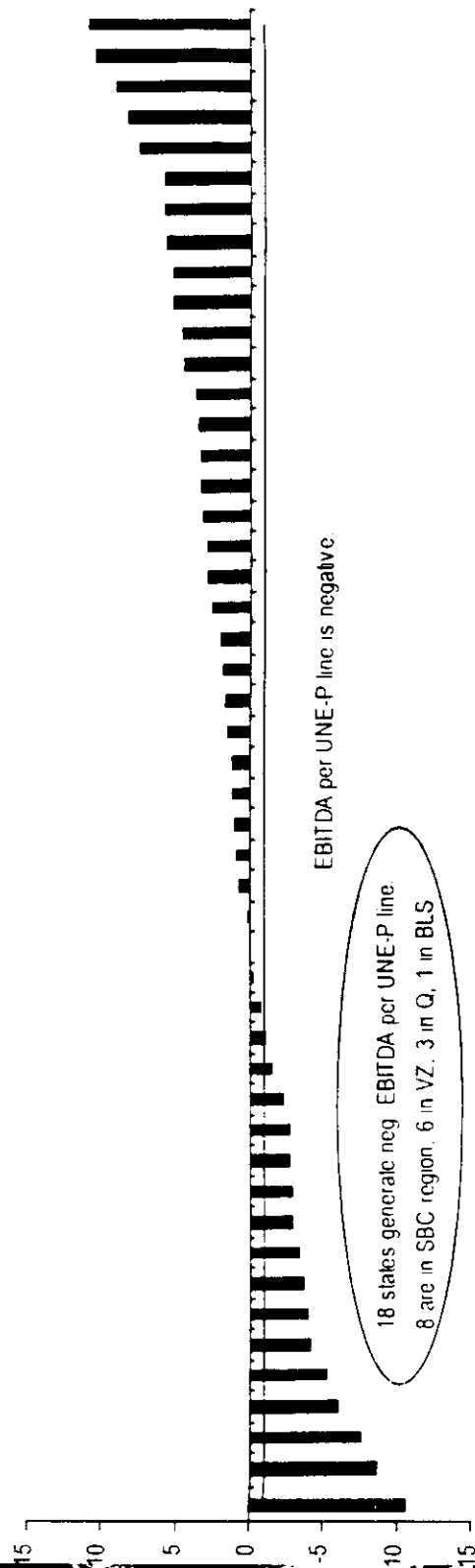
- a) Estimated average wholesale COGS and SG&A per line
 - Assume 5% avoided cost in COGS; 20% avoided cost in SG&A
- b) Compared this cost structure to revenue from wholesale UNE-P rates

| | COGS (% of sales) | S,G&A (% of sales) | EBITDA margins | % of COGS avoided | % of S,G&A avoided | Calculated EBITDA margins |
|-----|----------------------|-----------------------|-------------------|----------------------|-----------------------|------------------------------|
| SBC | 35% | 25% | 40% | 5% | 20% | -24% |
| VZ | 31% | 24% | 45% | 5% | 20% | -4% |
| BLS | 27% | 23% | 50% | 5% | 20% | 13% |

UNE-P Economics: Calculating the Impact

◆ EBITDA Per Line

- SBC - UNE-P Average (\$3.51) vs. Retail Average \$13.53
- BellSouth - UNE-P Average \$2.47 vs. Retail Average \$18.12
- Verizon - UNE-P Average (\$0.68) vs. Retail Average \$14.59
- Qwest - UNE-P Average \$1.03 vs. Retail Average \$14.69



AR MR II WACOTI ANOIT IN K MOC MO ES WO SI TA IS MO UP DO' MO VAS VO IN OK IS FI WAS S AS CO SP LO MS I STS I D IN SA VI W O VI MI NI PL ST

Source: UBS Warburg LLC and company reports



✱ UBS/Varing

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UNE-P Economics: Profitability Impact - SBC

| | Retail Profitability | | | | Wholesale Profitability | | | | EBITDA lost | EBITDA Lost/ Revenue Lost | FCF lost | FCF Lost/ Revenue Lost |
|-----------------------|----------------------|-----------------|-------------|--------------|--------------------------|-----------------|---------------------------------|--------------|----------------|------------------------------|--------------|---------------------------|
| | COGS | Gross Profit | S,G&A exp. | EBITDA | COGS 95% of ret. COGS | Gross Profit | S,G&A exp. 80% of ret. S,G&A | EBITDA | | | | |
| Illinois | 10.85 | 20.14 | 7.75 | 12.40 | 10.30 | -1.39 | 6.20 | 7.58 | 19.98 | 89.0% | 13.39 | 60% |
| Indiana | 12.20 | 20.79 | 8.00 | 12.80 | 10.64 | 6.44 | 6.40 | 0.04 | 12.76 | 83.2% | 8.55 | 56% |
| Michigan | 14.11 | 26.20 | 10.08 | 16.12 | 13.40 | -0.67 | 8.06 | 8.73 | 24.85 | 88.7% | 16.65 | 59% |
| Ohio | 11.76 | 21.84 | 8.40 | 13.44 | 11.17 | 3.24 | 6.72 | 3.48 | 16.92 | 86.3% | 11.34 | 58% |
| Wisconsin | 13.64 | 25.34 | 9.75 | 15.59 | 12.96 | 6.72 | 7.80 | 1.08 | 16.67 | 85.3% | 11.17 | 57% |
| California | 10.28 | 19.09 | 7.34 | 11.75 | 9.77 | 1.91 | 5.87 | 3.96 | 15.71 | 86.6% | 10.52 | 58% |
| Connecticut | 11.28 | 20.95 | 8.06 | 12.89 | 10.72 | 10.09 | 6.45 | 3.64 | 9.25 | 76.8% | 6.20 | 51% |
| Nevada | 10.50 | 19.51 | 7.50 | 12.00 | 9.98 | 11.19 | 6.00 | 5.19 | 6.82 | 72.7% | 4.57 | 49% |
| Arkansas | 17.90 | 33.25 | 12.79 | 20.46 | 17.01 | 0.44 | 10.23 | 10.67 | 31.13 | 88.8% | 20.86 | 59% |
| Kansas | 11.78 | 21.87 | 8.41 | 13.46 | 11.19 | 5.20 | 6.73 | 1.53 | 14.99 | 84.5% | 10.04 | 57% |
| Missouri | 12.64 | 21.47 | 9.03 | 14.44 | 12.00 | 7.36 | 7.22 | 0.14 | 14.30 | 83.1% | 9.58 | 56% |
| Oklahoma | 11.02 | 20.46 | 7.87 | 12.59 | 10.47 | 7.98 | 6.30 | 1.68 | 10.91 | 80.7% | 7.31 | 54% |
| Texas | 13.70 | 25.45 | 9.79 | 15.66 | 13.02 | 4.89 | 7.83 | 2.94 | 18.60 | 85.6% | 12.46 | 57% |
| Average/Total | 11.83 | 21.98 | 8.45 | 13.53 | 11.24 | 3.25 | 6.76 | -3.51 | 17.04 | 85.7% | 11.41 | 58% |
| Avg. Ameritech | 12.16 | 22.58 | 8.69 | 13.90 | 11.55 | 1.85 | 6.95 | -5.10 | 18.99 | 87.4% | 12.73 | 59% |

UNE-P Economics: Profitability Impact - BellSouth

| | Retail Profitability | | | | Wholesale Profitability | | | | EBITDA lost | EBITDA Lost/ Revenue Lost | FCF lost | FCF Lost/ Revenue Lost |
|----------------------|----------------------|--------------|-------------|--------------|-------------------------|-------------------------|-------------|-------------|--------------|------------------------------|--------------|---------------------------|
| | COGS | Gross Profit | S.G&A exp. | EBITDA | COGS 95% of rel | Gross Profit 80% of rel | S.G&A exp. | EBITDA | | | | |
| Alabama | 10.48 | 28.32 | 8.92 | 19.40 | 9.95 | 12.86 | 7.14 | 5.73 | 13.67 | 83.0% | 9.04 | 55% |
| Florida | 9.05 | 24.46 | 7.71 | 16.75 | 8.59 | 8.10 | 6.16 | 1.93 | 14.82 | 85.6% | 9.79 | 57% |
| Georgia | 10.79 | 29.16 | 9.19 | 19.98 | 10.25 | 8.55 | 7.35 | 1.20 | 18.78 | 86.8% | 12.41 | 57% |
| Kentucky | 11.04 | 29.86 | 9.41 | 20.45 | 10.49 | 4.63 | 7.53 | 2.89 | 23.34 | 88.9% | 15.43 | 59% |
| Louisiana | 9.49 | 25.65 | 8.08 | 17.57 | 9.01 | 14.06 | 6.47 | 7.60 | 9.97 | 79.4% | 6.59 | 52% |
| Mississippi | 11.21 | 30.30 | 9.55 | 20.76 | 10.65 | 11.12 | 7.64 | 3.48 | 17.77 | 85.4% | 11.41 | 56% |
| North Carolina | 9.64 | 26.05 | 8.21 | 17.85 | 9.15 | 9.54 | 6.57 | 2.97 | 14.87 | 85.1% | 9.83 | 56% |
| South Carolina | 10.13 | 27.40 | 8.63 | 18.77 | 9.63 | 9.80 | 6.91 | 2.89 | 15.67 | 85.4% | 10.49 | 56% |
| Tennessee | 9.36 | 24.29 | 7.97 | 17.33 | 8.89 | 8.29 | 6.38 | 1.91 | 15.41 | 85.8% | 10.18 | 57% |
| Average/Total | 9.78 | 26.45 | 8.33 | 18.12 | 9.29 | 9.13 | 6.67 | 2.47 | 15.65 | 85.3% | 10.34 | 57% |

UNE-P Economics: Profitability Impact - Verizon

| | Retail Profitability | | | | Wholesale Profitability | | | | EBITDA lost | EBITDA Lost/ Revenue Lost | FCF lost | FCF Lost/ Revenue Lost |
|---------------|----------------------|-----------------|------------|--------|--------------------------|-----------------|---------------------------------|--------|----------------|------------------------------|-------------|---------------------------|
| | COGS | Gross Profit | S,G&A exp. | EBITDA | COGS 95% of ret. COGS | Gross Profit | S,G&A exp. 80% of ret. S,G&A | EBITDA | | | | |
| Connecticut | 10.77 | 22.85 | 7.95 | 14.90 | 9.75 | 11.05 | 6.35 | 4.69 | 10.21 | 78.9% | 6.75 | 52% |
| DC | 9.50 | 21.15 | 7.36 | 13.79 | 9.03 | 6.84 | 5.88 | 0.96 | 12.84 | 83.6% | 8.48 | 55% |
| Delaware | 9.70 | 21.59 | 7.51 | 14.08 | 9.21 | 6.81 | 6.01 | 0.80 | 13.28 | 83.9% | 8.77 | 55% |
| Maryland | 11.32 | 25.19 | 8.76 | 16.43 | 10.75 | 8.07 | 7.01 | 1.06 | 15.37 | 84.2% | 10.15 | 56% |
| New Jersey | 8.52 | 18.95 | 6.59 | 12.36 | 8.03 | 4.52 | 5.27 | 0.75 | 13.11 | 85.0% | 8.67 | 56% |
| West Virginia | 15.19 | 33.81 | 11.76 | 22.05 | 14.43 | 12.07 | 9.41 | 2.66 | 19.39 | 84.0% | 12.81 | 56% |
| Pennsylvania | 9.80 | 21.81 | 7.59 | 14.22 | 9.31 | 5.81 | 6.07 | 0.26 | 14.49 | 84.9% | 9.57 | 56% |
| Virginia | 10.12 | 22.52 | 7.83 | 14.69 | 9.61 | 7.45 | 6.27 | 1.19 | 13.50 | 83.6% | 8.92 | 55% |
| Maine | 11.27 | 25.08 | 8.72 | 16.36 | 10.70 | 4.64 | 6.98 | -2.34 | 18.69 | 86.7% | 12.35 | 57% |
| Massachusetts | 11.42 | 25.43 | 8.84 | 16.58 | 10.85 | 4.24 | 7.08 | 2.84 | 19.42 | 87.0% | 12.83 | 57% |
| New Hampshire | 10.50 | 23.36 | 8.13 | 15.23 | 9.97 | 15.57 | 6.50 | 9.07 | 6.17 | 69.4% | 4.08 | 46% |
| New York | 9.62 | 21.42 | 7.45 | 13.97 | 9.14 | 3.19 | 5.96 | 2.77 | 16.74 | 86.8% | 11.06 | 57% |
| Rhode Island | 10.78 | 24.00 | 8.35 | 15.65 | 10.24 | 17.22 | 6.68 | 10.54 | 5.11 | 64.8% | 3.38 | 43% |
| Vermont | 11.53 | 25.67 | 8.93 | 16.74 | 10.96 | 2.89 | 7.14 | 4.25 | 20.99 | 87.7% | 13.87 | 58% |
| Average/Total | 10.05 | 22.37 | 7.78 | 14.59 | 9.55 | 5.55 | 6.22 | -0.68 | 15.26 | 85.3% | 10.09 | 56% |

UNE-P Economics: Profitability Impact - Qwest

| | Retail Profitability | | | | Wholesale Profitability | | | | EBITDA lost | EBITDA Lost/ Revenue Lost | FCF lost | FCF Lost/ Revenue Lost |
|---------------|----------------------|-----------------|------------|--------|-------------------------|-----------------|--------------------------|--------|----------------|------------------------------|-------------|---------------------------|
| | COGS | Gross Profit | S,G&A exp. | EBITDA | COGS 95% of ret | Gross Profit | S,G&A exp. 80% of ret | EBITDA | | | | |
| Arizona | 11.26 | 20.92 | 8.05 | 12.87 | 10.70 | 17.40 | 6.44 | 10.97 | 1.91 | 41.1% | 1.05 | 23% |
| Colorado | 11.87 | 22.05 | 8.48 | 13.57 | 11.28 | 1.60 | 6.78 | 5.19 | 18.75 | 86.8% | 10.31 | 48% |
| Idaho | 11.72 | 21.76 | 8.37 | 13.39 | 11.13 | 11.31 | 6.70 | 4.62 | 8.77 | 75.7% | 4.83 | 42% |
| Iowa | 10.29 | 19.11 | 7.35 | 11.76 | 9.78 | 7.38 | 5.88 | 1.50 | 10.26 | 80.1% | 5.64 | 44% |
| Minnesota | 11.29 | 20.96 | 8.06 | 12.90 | 10.72 | 2.72 | 6.45 | 3.73 | 16.63 | 85.9% | 9.14 | 47% |
| Montana | 12.51 | 23.22 | 8.93 | 14.29 | 11.88 | 15.46 | 7.15 | 8.32 | 5.97 | 66.8% | 3.29 | 37% |
| Nebraska | 13.08 | 24.30 | 9.35 | 14.95 | 12.43 | 12.76 | 7.48 | 5.29 | 9.67 | 75.8% | 5.32 | 42% |
| New Mexico | 10.38 | 19.28 | 7.42 | 11.86 | 9.86 | 11.88 | 5.93 | 5.95 | 5.91 | 69.8% | 3.25 | 38% |
| North Dakota | 12.84 | 23.85 | 9.17 | 14.68 | 12.20 | 10.70 | 7.34 | 3.36 | 11.31 | 78.8% | 6.22 | 43% |
| Oregon | 11.48 | 21.32 | 8.20 | 13.12 | 10.91 | 9.75 | 6.56 | 3.19 | 9.93 | 78.2% | 5.46 | 43% |
| South Dakota | 12.48 | 23.17 | 8.91 | 14.26 | 11.85 | 11.69 | 7.13 | 4.56 | 9.70 | 76.6% | 5.33 | 42% |
| Utah | 10.51 | 17.52 | 7.51 | 12.01 | 9.98 | 9.46 | 6.01 | 3.46 | 8.56 | 76.8% | 4.71 | 42% |
| Washington | 11.00 | 20.42 | 7.85 | 12.57 | 10.45 | 0.28 | 6.28 | 6.01 | 18.57 | 87.4% | 10.22 | 48% |
| Wyoming | 14.74 | 27.37 | 10.53 | 16.84 | 14.00 | 14.26 | 8.42 | 5.84 | 11.00 | 76.4% | 6.05 | 42% |
| Average/Total | 11.38 | 21.13 | 8.13 | 13.00 | 10.81 | 7.53 | 6.50 | 1.03 | 11.98 | 81.3% | 6.59 | 45% |



UNE-P Economics: Calculating the Impact

◆ 4) Estimated Future Line Loss in Each State

- **SBC:** Lost 692K lines to UNE-P in 2Q, up from 358K in 1Q
 - We believe roughly half of these were in June alone
 - AT&T entered IL and OH in mid-June, CA in early August
 - We expect line loss of 1m in Q3 and 1.2m in Q4
- **BellSouth:** Lost 278K lines to UNE-P in 2Q, up from 239K in 1Q
 - Losing 100-120/ quarter to reseller in Florida
 - AT&T in Georgia and is likely to enter Florida as well
 - We expect line loss of 300K in Q3 and 400K in Q4
- **Verizon:** Lost 110K lines to UNE-P in 2Q, up from 64K in 1Q
 - AT&T increasing marketing expenditures in New York
 - Announced entry into New Jersey in September
 - Expect to enter Pennsylvania in 4Q
 - We expect line loss of 230K in Q3 and 500K in Q4

UNE-P Economics: UNE-P Line Projections

| Total Switched Access Lines | | | | | | | | | | | |
|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | 1001 | 2001 | 3001 | 4001 | 1002 | 2002 | 3002 | 4002e | 2000 | 2001 | 2005e |
| SBC | 61,254 | 60,578 | 60,230 | 59,532 | 59,036 | 58,255 | 57,325 | 56,345 | 61,270 | 59,532 | 56,345 |
| VZ | 62,903 | 62,465 | 61,967 | 61,551 | 61,227 | 60,373 | 58,027 | 57,276 | 62,902 | 61,551 | 57,276 |
| BLS | 25,898 | 25,666 | 25,575 | 25,422 | 25,425 | 25,138 | 24,837 | 24,612 | 25,908 | 25,422 | 24,612 |
| Q | 17,929 | 17,808 | 17,687 | 17,454 | 17,250 | 16,955 | 16,730 | 16,531 | 18,089 | 17,454 | 16,531 |
| Total | 167,984 | 166,517 | 165,459 | 163,959 | 162,938 | 160,721 | 156,920 | 154,764 | 168,169 | 163,959 | 154,764 |
| % growth | 0.2% | 1.1% | 1.7% | -2.8% | -3.6% | -3.0% | -4.8% | -5.4% | 0.9% | -2.8% | -5.4% |
| SBC | 0.2% | 1.1% | 1.7% | -2.8% | -3.6% | -3.0% | -4.8% | -5.4% | 0.9% | -2.8% | -5.4% |
| VZ | 0.6% | 0.4% | 1.4% | -2.1% | -2.7% | -3.3% | -6.4% | -6.9% | 1.4% | -2.1% | -6.9% |
| BLS | 0.1% | 0.8% | 1.9% | -3.5% | -3.8% | -4.8% | -5.4% | -5.3% | 1.9% | 3.5% | -5.3% |
| Q | 0.1% | 0.8% | 1.9% | -3.5% | -3.8% | -4.8% | -5.4% | -5.3% | 1.9% | 3.5% | -5.3% |
| Total | 0.3% | -0.7% | -1.6% | -2.5% | -3.0% | -3.5% | -5.2% | -5.6% | 1.3% | -2.5% | -5.6% |
| Total UNE-P | 1,373 | 1,760 | 2,159 | 2,403 | 2,761 | 3,453 | 4,453 | 5,653 | 1,012 | 2,403 | 5,653 |
| SBC | 1,615 | 2,093 | 2,118 | 2,195 | 2,259 | 2,369 | 2,599 | 3,099 | 1,687 | 2,195 | 3,099 |
| VZ | 1,645 | 2,093 | 2,118 | 2,195 | 2,259 | 2,369 | 2,599 | 3,099 | 1,687 | 2,195 | 3,099 |
| BLS | 303 | 385 | 505 | 601 | 840 | 1,118 | 1,418 | 1,818 | 224 | 601 | 1,818 |
| Q | 431 | 451 | 459 | 453 | 491 | 512 | 547 | 582 | na | 453 | 582 |
| Total | 3,752 | 4,689 | 5,261 | 5,652 | 6,351 | 7,452 | 9,017 | 11,152 | 2,923 | 5,652 | 11,152 |
| Net UNE-P Adds | 361 | 387 | 399 | 244 | 358 | 592 | 1,000 | 1,200 | na | 1,391 | 3,250 |
| SBC | 42 | 448 | 45 | 57 | 64 | 110 | 230 | 500 | na | 508 | 904 |
| VZ | 79 | 82 | 120 | 96 | 239 | 278 | 300 | 400 | na | 377 | 1,217 |
| BLS | na | 20 | 8 | 6 | 38 | 21 | 35 | 35 | na | na | na |
| Q | na | na | na | na | na | na | na | na | na | na | na |
| Total | 398 | 937 | 512 | 391 | 699 | 1,101 | 1,565 | 2,135 | 2,276 | 5,500 | 6,994 |
| UNE-P Penetration | 2.2% | 2.9% | 3.6% | 4.0% | 4.7% | 5.9% | 7.8% | 10.0% | 1.7% | 4.0% | 10.0% |
| SBC | 2.2% | 2.9% | 3.6% | 4.0% | 4.7% | 5.9% | 7.8% | 10.0% | 1.7% | 4.0% | 10.0% |
| VZ | 2.6% | 3.4% | 3.5% | 3.7% | 3.9% | 4.5% | 5.4% | 7.4% | 2.7% | 3.6% | 5.4% |
| BLS | 1.2% | 1.5% | 2.0% | 2.4% | 3.3% | 4.4% | 5.7% | 7.4% | 0.9% | 2.4% | 7.4% |
| Q | 2.4% | 2.5% | 2.6% | 2.6% | 2.8% | 3.0% | 3.3% | 3.5% | na | 2.6% | 3.5% |
| Total | 2.2% | 2.8% | 3.2% | 3.4% | 3.9% | 4.6% | 5.7% | 7.2% | 1.7% | 3.4% | 7.2% |

URS Waburg



UNE-P Economics: What's the Call?

◆ Downgrading the Bells (BLS, SBC and VZ)

- Expect the group to perform inline with the market over the next 12 months
- Dividend yields should provide a backstop on valuations

◆ Economics of UNE-P worse than expected for the Bells

- Will put additional pressure on Bell margins and earnings
- SBC and BellSouth are the most exposed

◆ Line Losses Will Likely Accelerate in 2H02

- AT&T and MCI
- No near-term regulatory relief expected

◆ Long Distance is Only a Partial Offset

- Local revenue is much higher margin than long distance
- To breakeven on the EBITDA line, Bells need to add 5.4 long distance customers for every UNE-P line added

◆ 2003 EPS Estimates are Too High

- We now expect 2003 EPS to decline 1.8%; the Street still forecasts growth


Additional information available upon request.
Prices of companies mentioned as of :

| | | | |
|------------------------------------|------|------|-----|
| AT&T Corp | 2 | T | N/A |
| BellSouth Corp | 2 | B.S | N/A |
| Qwest Communications International | 2 | Q | N/A |
| SBC Communications, Inc. | 2 | SBC | N/A |
| Sprint LON Group | 2 | LCN | N/A |
| Verizon Communications | 2.57 | VZ | N/A |
| WorldCom Group | 1.2 | WCOM | N/A |

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LIBRARY 

UNe-P: the Un-Profit

Regulation pressuring RBOC profits

Dresdner
Kleinwort
Wasserstein
Research

Industry update

RBOCs' core profit center is under severe attack from competitive forces. Regulators have reduced UNE pricing such that CLECs are using UNE lines to penetrate the residential and small business markets. In our view, until UNE pricing becomes more rational, the RBOCs will suffer steeper profitability squeezes from CLECs using UNE lines.

Hold

BellSouth Corporation
Qwest Communications
SBC Communications
Verizon Communications

- **CLEC penetration rising:** By the end of 2001, according to the FCC, CLECs accounted for 10.2% of the nation's 192m switched lines, up from 7.7% 12 months earlier, a 32% increase in market share. Cable telephony lines are increasing at a slightly faster rate than overall CLEC lines. By the end of 2001, according to the FCC, cable telephone lines constituted 11% of CLEC lines (2.2m lines), and 1% of all switched lines.
- **Lost ILEC profits:** ILECs lost 1.5m lines in the last six months of 2001 in the form of UNEs (unbundled network elements) to CLECs, which we estimate comes to \$1bn in lost annualized sales, most of which is pure profit. In a six-month span, then, after taxes, ILEC bottom lines lost about \$325m in net income, and \$4.2bn in market capitalization assuming a 13x P/E multiple. The Bells control about 94% of the nation's incumbent access lines, so the RBOCs, primarily through UNE, lost \$4bn in market capitalization in the last half of 2001. The Bells currently have a \$220bn equity market cap, meaning that CLECs conceivably destroyed 2% of Bell equity value in the H2 2001.
- **Some CLEC overbuilding:** In H2 01, CLECs gained 2.4m lines, which we believe was created exclusively at the expense of the ILECs, or 19,000 lines per business day. Some of these lines are lost to cable telephony or where CLECs build their own connections directly to businesses. In such cases, the CLEC has overbuilt, or completely severed the connection between the ILEC and the customer, removing the ILEC from 100% of their former revenue stream.
- **Ratings:** We maintain our Hold ratings on BellSouth Corp., Qwest Communications, SBC Communications and Verizon Communications.

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Online research: www.drkwresearch.com Bloomberg: DRKW<GO>

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Investment summary and conclusion

Regulators are forcing
unprofitable resale pricing upon
the local industry through
UNEs

The concern isn't the CLECs: with a weak capital market, and the techno bubble-burst, the money CLECs need to build out a local network IS NOT available in the public or bank markets. Ironically, the impact of CLEC competition has never been more NEGATIVE for RBOCs (we interchange the terms RBOCs and ILECs). Why? Because the regulators are forcing unprofitable resale pricing upon the local industry through Unbundled Network Elements, or UNEs. What are UNEs?

UNEs are network 'elements' – switching, copper lines, data base hookups, fiber trunks into office buildings, etc., that the RBOC is forced to lease to the CLEC. When a CLEC uses UNEs INSTEAD of building out its own copper loops, switches, etc., it avoids major capital expense, and 'rides' the RBOCs' investments made over decades. When capital flowed freely to CLECs in the 1990s, CLECs took that money and decided to build their own networks. At the time that seemed to be a rational decision: money would be available from Wall Street 'forever', and an owned network would be more profitable than a leased one – eventually. Unfortunately for those CLECs that overbuilt over wide geographic territories, i.e., the "XOs" of the world that decided there was a business case for a 'national – local' infrastructure that served (in retrospect) way too many cities, thereby never achieving density – the key to local profitability – the capital markets dried up. Left, were the liquid competitors to the Bells; AT&T and MCI (until now), who, over the last two years, have taken up UNE, or leasing, rather than constructing a second local network, as the means to compete. WHY?

AT&T and MCI are very concerned about losing long distance customers to the RBOCs. So even if UNE isn't as profitable as owning your own network (by being able to offer local service promptly (which UNE enables) and at a decent profit (which UNE enables)), the long distance carriers can combat long distance customer defection, making THEIR foray into leasing local services more profitable by avoiding lost long distance revenues, than an "XO" could have.

- ▶ Hence, the recent rapid entry into long distance by the RBOCs has been accompanied by a rapid expansion of the use of UNEs by CLECs, principally AT&T and MCI.
- ▶ States rule over the Feds on local telephony. States have been widening the UNE discount – to the detriment of the RBOCs – as a quid pro quo to RBOC long distance entry. Local profit margins are much fatter (45%) than long distance margins (25%), so the current trade-off is a loser for the RBOCs.

► The discount has caused much more rapid CREC UNE use. This was seen most recently in California, where the CA PUC has recently ruled that SBC can provide long distance (SBC still must apply at the FCC) in the case of CA. AT&T got lower UNE rates BEFORE SBC was able to get into long distance causing a timing-engendered loss as well.

Which regulators? Well, first the FCC, which took the 1996 Act that did not specify particular UNEs or what once they should be made available at. The last FCC made a long list of UNEs and set severe discount frameworks to those UNEs. Then the states got into the act by setting the actual UNE rate, i.e., the discount from retail rates offered to an RBOC's customers. These discounts can be as high as 65%. At the margin, such revenue loss, accompanied by continued network costs, results in almost one-for-one profit loss – thus, the UNE is highly profit-destructive.

The only saving grace is that MCI has serious financial difficulties, and could be forced to abandon its UNE expansion program – to the Bell's benefit. In addition, AT&T, which is in much better financial shape, and can, we estimate, survive on its own for years, could be bought out by a Bell if the current telecom meltdown continues. In other words, the regulators – the FCC and DOJ – may allow the oligopolization of the telecom industry, where there are three to four vertically and horizontally integrated providers. That is, three to four old Ma Bells.

► For investors, we believe that the Bells are trading near historically low multiples of EBITDA, which is the most important barometer of value, in our view. However, UNE is, at the margin, so value destructive, that we would be HOLDERS, if and until the regulators become more realistic. And if they don't, shareholders might be rewarded by a severe downsizing of MCI and/or absorption of AT&T by a Bell.

Conclusion: Hold

"The cream skim" – business, population density and demographics

45% of CLEC lines served residential and small business markets

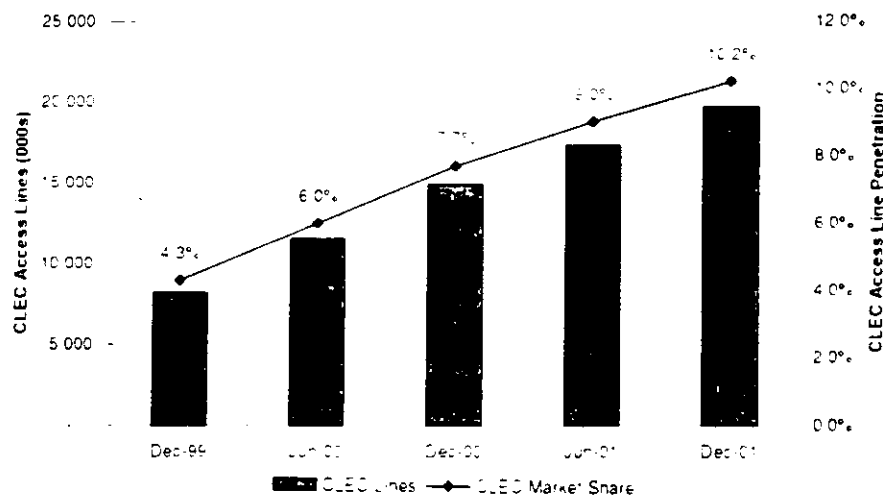
The current competitive policies favor rich residential customers, large businesses and states with greater population density.

According to the FCC, 55% of CLEC lines served medium and large businesses and government customers. In contrast, just 23% of ILEC lines served such customers. **Conversely, 45% of CLEC lines served residential and small business lines.** Businesses and government offices are more densely packed, and spend more per access line than residents.

Thus, the ILECs are left holding the 'bag' – serving more of the costly (read: geographically dispersed) and lower paying line base. We view the 'cream skim' as one of the most compelling arguments that local competition regulation is destructive and illogical.

Year-end 2001E CLEC line composition

Figure 1: CLEC access lines, 1999-2001



25 JUL 2002

Source: FCC

The goal of the 1996 Act was to create the environment for local competition, not create local competition

Overbuild: 33%, but in key sectors much lower

Of the 33% overbuild percentage, we estimate that under 5% of residential lines are overbuilt lines. We believe this is a *telling* statistic and perhaps the most important in this report. In the US at year-end 2001, there were 134m residential and small business access lines. The majority of overbuilt lines are business lines, with a concentration on medium and large sized businesses. Our view is that the current rules forcing RBOCs to resell local lines to CLECs at very deep discounts are off course. **The goal of the 1996 Act was to create the environment for local competition, not create local competition.** Although seemingly subtle, this is a huge distinction. The idea is that to produce new, exciting services and pricing programs requires a competitor to provide new, exciting services. How can that occur if the CLEC is reselling the RBOCs' service? With only a 33% overbuilding rate, the desired outcome of the Act is unaccomplished. The idea was to give the CLECs a means to build customer scale upon which they could then justify building their own network, since this is an industry of scale. In point of fact, the growth in UNE lines is accelerating, despite the fact that the base of CLEC customers is also expanding. With UNE, the CLECs are merely behaving as rational decision makers. If it's cheaper and less risky to resell rather than build, then resell is the answer. Unlike the long distance industry, which is less of a natural monopoly since it takes just several bn dollars and two to three years to build a national network, except for the cream of the business market and the cream, i.e., demographically desirable (read: rich homeowners who can buy many services) residential market, a new national local network is unlikely to emerge. We won't get into "what ifs," but under a more rational local competitive framework, overbuilding might have occurred to a greater extent.

Cable telephony penetration is increasing even faster than overall CLEC penetration

Sinking the sunk costs

Overbuilding erases any revenue contribution from former customers or prospective customers that would have used a Bell if an overbuilding CLEC wasn't around. It fully 'strands' the lines' assets. The business base is easier to overbuild because they are located in office buildings and otherwise packed more densely. So the 'cream skim' has been accompanied by the 'overbuild.' That is, for years, CLECs such as Time Warner Communications, AT&T Business and WorldCom's MFS (although we believe one of WCOM's downfall was its inability to leverage the MCI long distance base and 'backsell' an MFS local product into it) have been building their own trunks into business locations, either fully bypassing the ILEC, or perhaps renting minimal network subsegments such as the last link into a building. Now, cable telephony is copying the CLECs on the residential side. By piggybacking onto the cable television network, they found an economical way to overbuild the less dense residential base, a danger to the Bells that have concerned us for some time. FCC statistics show cable telephony penetration increasing even faster than overall CLEC penetration, and AT&T Broadband reported in Q2 02 that, for the first time, its cable telephony operations are EBITDA-positive, validation that a means to 'crack' the natural monopoly in the local residential market exists. It still takes a lot longer to deploy a cable telephony line than a UNE line. Thus, cable telephony is probably impacting residential lines' margins, but not taking significant market share yet.

The UNE platform is growing rapidly in use. To the CLEC the only difference between reselling and UNEs is the cost. In fact, UNE is nothing more than resale with 2-3x the discount, which comes to a 35%-60% discount. UNE-P has made it possible for AT&T and MCI to compete in the residential arena. UNE-P resale (and cable telephony overbuilding) are being used to penetrate the residential and small business market. According to the FCC, CLECs served 4.6% of those markets at the end of 2000, and 6.6% of such markets by year-end 2001. There were 9.5m UNE loops at year-end 2001, up from 8m six months earlier. About 61% of 5.8m lines were UNE-P lines that included switching, and the rest (3.7m) were UNE loops where the CLEC just leases the

UNE-P has made it possible for AT&T and MCI to compete in the residential arena

UNE: 47% (24% at YE 1999) - erased 2% of bell equity?

Source: FCC

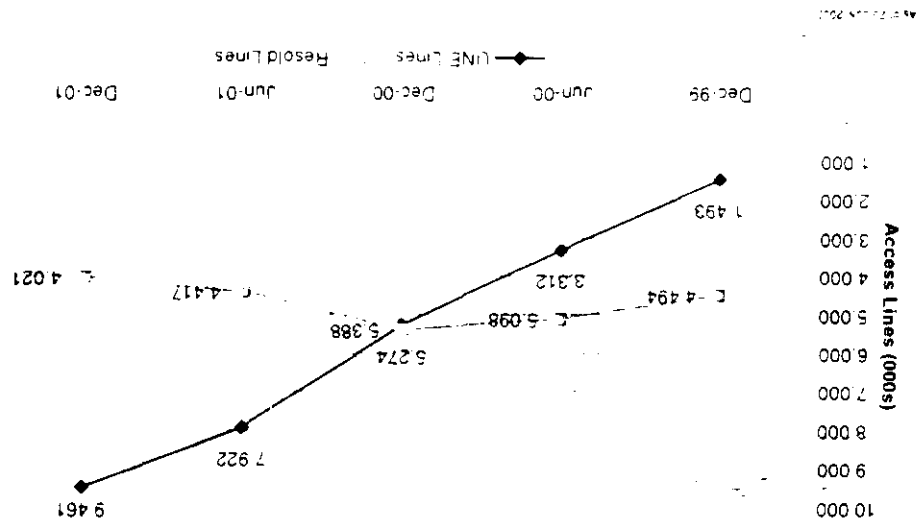


Figure 2: UNE vs. resold lines, 1999-2001

Resale: 22%, down from 43% two years earlier
 Resale is uneconomical for CLECs, so they are dropping resale lines or changing them to a UNE-P "lines" regime, which are functionally equivalent, but add 20%-40% points of gross margin to a CLEC.

UNE-P lines add 20-40 points of gross margin to a CLEC

The bottom line is that competition comes in two flavors: reselling the RBOC's network or overbuilding. The Bells argue that low UNE rates, which can force an RBOC to resell a local line to a CLEC such as MCI "Neighborhood" for as much as 70% off of retail, aren't so bad because they at least provide some revenue across a "high" fixed cost structure. Also, since the line is deployed already (sunk cost), and only minimal cash is required to operate that line, an RBOC would select UNE to overbuilding as the lesser of two evils. We agree, however, with overbuilding now taking place in the business and residential ends of the local market; we expect that the value of RBOC's plant, net their sunk costs, are falling, and that plant write downs loom. Again, the overbuilding is concentrating in the large business arenas and will occur for plant that serves large businesses, not the residential market.

copper loop, and provides the other network elements. UNE-loops cause the largest revenue loss under the local wholesale scheme. However, UNE loop sales should ameliorate, in our view.

ILECs lost 1.5m lines in the last six months of 2001 in the form of UNEs to CLECs, which we estimate comes to \$1bn in lost annualized sales, most of which is pure profit. In a six-month span, then, after taxes, ILEC bottom lines lost about \$325m in net income, and \$4.2bn in market capitalization, assuming a 13x P/E multiple. The Bells control about 94% of the nation's incumbent access lines, so the RBOCs, primarily through UNE, lost \$4bn in market capitalization in the last half of 2001. The Bells currently have a \$220bn equity market cap, meaning that CLECs conceivably destroyed 2% of Bell equity value in the second-half of 2001, assuming our estimates are reasonable and that the market actually "made" this observation and factored it into stock prices. There's no assurance RBOC stocks didn't decline due to other reasons, and that the UNE-P issue has yet to be factored into the stocks.

Case study: AT&T UNEs

AT&T's new senior management states that the UNE-P platform is expected to be as successful in penetrating the business market as it has been in the residential market. Today, T has some 32m local lines, of which 500,000, or 15%, are UNE-P-based. That percentage will increase. We estimate that the UNE-P platform will be instrumental in enabling AT&T to reach its goal of \$10bn in annual business local revenues in five years. Note: it takes T about two years for UNE-P, on its own, to breakeven, excluding the positive impacts of bundling long distance with UNE-P.

From a macroeconomic point of view there are several concerns with the UNE-P system:

- It's a policy-stimulated transfer of wealth (from shareholders and employees to consumers), rather than being left to market forces.
- In the longer-term, it could rob consumers of advanced services that require the RBOCs' plentiful cash flow to fund
- Asset write-downs will cause stock-shock and a shock to the telecom 'supplier' system

UNE is a creation of the prior FCC administration. Only network elements such as switching, local loop costs and other various network elements were required under the 1996 Act to be sold at reasonable discounts to the CLEC. The FCC decided that the ILECs were required to "rebundle" these elements and sell them at much steeper discounts than plain resale. Plain resale was required by the Act as well. The price was to be the retail price charged by the Bell less avoidable costs such as selling costs. That was interpreted to mean a 20%-25% discount to retail. However, the CLECs didn't have any margin left over for a profit. We're not sure, however, that profit was required by the Act. At the end of the day, the spirit of the Act was to deliver a mechanism to jumpstart local competition, and we interpret that to mean to develop a

The UNE-P platform will be instrumental in enabling AT&T to reach its goal of 10bn in annual business local revenues in five years

mechanism to allow competitors to build up a large enough base of customers – either through UNE elements or resale to TNE justifying building their own network

Regulators forgot to notice that wireless is local competition, too

In its July 2002 Local Telephone Competition report, the FCC reported that US wireless subscribers increased from 79.7m at year-end 1999 to 122.4m by year-end 2001, or a 23.9% CAGR. With wireless carriers offering big bucket minute plans including features like Caller ID and free roaming, wireless phones are replacing landlines for many consumers. As wireless companies continue to build out their networks and improve service quality, wireless-displacement will increasingly displace RBOC landlines

Wireless displacement is not only affecting primary access lines, but is having a devastating effect on RBOC second lines. Second line growth for the RBOCs is declining rapidly, primarily as a result of wireless displacement of these second lines. For example, BLS reported a Q2 02 second line YoY growth decline of 10.6%, while SBC's second lines declined 8.7% YoY in Q2 02. Historically, second lines have increased as much as 15%-20% YoY, and just two quarters ago we estimate that these second line were declining approximately 5%. If we estimate that the RBOCs combined for 17m second lines at year-end 2001, and each second line generates \$5 per month with a 65% EBITDA margin, then \$633m of EBITDA was generated from RBOC second lines in 2001. This \$633m of EBITDA is in danger of being reduced by 10% per year, primarily due to wireless displacement.

End result

\$1.4bn decline over last year

Figure 3: RBOC local wireline

| Revenues (\$000s) | 01 01 | 02 01 | 03 01 | 04 01 | 01 02 | 02 02 |
|-------------------|--------|--------|--------|--------|--------|--------|
| VZ | -1,920 | -1,953 | -1,956 | -1,939 | -1,974 | -1,968 |
| YoY growth | | | | | | -4.4% |
| SBC | -1,113 | -1,034 | -1,007 | -1,043 | -978 | -973 |
| YoY growth | | | | | | 5.8% |
| BLS | 4,610 | 4,700 | 4,733 | 4,757 | 4,614 | 4,586 |
| YoY growth | | | | | | 2.9% |
| Q | 3,877 | 3,801 | 3,837 | 3,708 | 3,458 | 3,434 |
| YoY growth | | | | | | 5.1% |
| Total | 29,220 | 29,609 | 29,237 | 29,045 | 28,707 | 28,225 |
| YoY growth | | | | | | -4.7% |

Source: Verizon, SBC Communications, Qwest, BellSouth

Regulators have moved to an active stance to redesign the industry

Regulators hurting consumers in long run

The combination of very effective lobbying on the part of small and large (read: AT&T, CLECs, and a democratic FCC (thought to be friendly to long distance and CLECs, not RBOCs) prodded the FCC to create the UNE-Platform, or UNE-P. The FCC decided that UNEs should be priced at a theoretical level, that is, what would it cost for a brand new local network to add an access line. The assumptions include state-of-the-art networks throughout, and perfect capital and man-hour deployments. In other words, we believe these are imaginary, non-historic; therefore, in our opinion, this is an unreasonable way to regulate an industry. Another related issue is that of regulation altogether. In the 10 years of covering this industry, regulators have, in our view, taken an exponentially more involved role in the "day-to-day" decisions about pricing, mergers, service offerings, inter-carrier relationships, etc. than *before* the 1996 Act. It wasn't supposed to turn out that way. Regulators have moved to an active stance to redesign the industry, from a passive stance where carriers knew the rules and operated *freely* within them. They knew what their returns would be, and didn't have to make the very risky types of investments RBOCs have made in the past few years to *compensate for the loss of growth in the core business that has destroyed shareholder value*. On top of that the regulators have had the nerve to regulate the newer high-risk capital return projects such as DSL. Now every carrier move is scrutinized by a state or FCC hearing, slowing down the communications revolution of the late 1990s. In the short run, the consumer wins with these artificially lowered local rates. In the long term, the consumer will suffer as ILECs cut their capital budgets by 30%, which will produce fewer services, more network outages, and crummier customer service. The regulators don't understand that the local industry, unlike the long distance industry, is the closest thing in telecoms to a "natural" monopoly. Wireless, long distance and undersea networks cost less per DS-0 to build, and are constructed in a matter of months or a year or two, not the many years it takes to build a local landline network.

Figure 4: Dresdner Kleinwort Wasserstein RBOCs earnings universe

| Rating | Company | Symbol | Price | | Fiscal year | 52 week (US\$) | | Earnings per share (US\$) | | | Div | | Est 5 yr gr rate (%) | Ind div (US\$) | Yield (%) | Mkt cap. (US\$m) |
|--------|----------------------------|--------|---------------|---------------|-------------|----------------|---------|---------------------------|--------|--------|--------|--------|----------------------|----------------|-----------|------------------|
| | | | 20 Aug (US\$) | Target (US\$) | | High | Low | 2001A | 2002E | 2003E | 2001A | 2002E | | | | |
| Hold | BellSouth Corp | BLS | \$25.50 | \$28.00 | Dec | \$42.95 | \$20.10 | \$2.21 | \$2.15 | \$2.23 | \$0.59 | \$0.53 | NA | \$0.80 | 3.1% | \$46.076 |
| Hold | Owens Communications | O | \$2.95 | \$2.00 | Dec | \$34.00 | \$1.07 | \$0.05 | \$0.52 | \$0.40 | \$0.08 | \$0.15 | NA | \$1.54 | 52.2% | \$4.628 |
| Hold | SBC Communications (1) | SBC | \$27.68 | \$28.00 | Dec | \$47.50 | \$22.20 | \$2.35 | \$2.31 | \$2.41 | \$0.59 | \$0.55 | NA | \$1.08 | 3.9% | \$88.949 |
| Hold | Verizon Communications (1) | VZ | \$31.80 | \$38.00 | Dec | \$55.99 | \$26.01 | \$3.00 | \$3.06 | \$3.15 | \$0.75 | \$0.78 | NA | \$1.54 | 4.8% | \$80.874 |

(1) All 10 firms have a long position in the common shares of this company

Source: First Call Research, D&W estimates